


<b>SAFETY DATA SHEET</b>	
Monosodium Phosphate Anhydrous	1 of 10

Complying with 1907/2006/EEC Regulation of 18 December 2006 ("REACH Regulation") and REGULATION (EC) No 1272/2008 (CLP)

## Section 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifier

**Product name:** Monosodium Phosphate Anhydrous

**Chemical name (e.g. IUPAC name):** Monosodium Phosphate Anhydrous;

**Trade names:** Monosodium Phosphate Anhydrous; MSP-Gr; MSP-Pw; C-510; C-511; C-512; C-516;

**Synonyms:** Monosodium Phosphate, Monobasic; Monosodium Dihydrogen Phosphate; Phosphoric acid, monosodium salt; MSP;

**Chemical formula:**  $\text{NaH}_2\text{PO}_4$

**Fertilizer formula:** Not applicable

**Product type:** Solid (powder or granular)

**CAS number:** 7558-80-7

**EC number:** 231-449-2

**Notification number:** 02-2119779713-26-0000

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Common/important uses of the substance/preparation:**

Food processing- buffer, emulsifier.

Pharmacopoeia- nutrient, buffer.

Industries- water treatment, metal treatment, corrosion control, drilling mud, ceramics, acid-base cleaners.

### 1.3 Details of the supplier of the safety data sheet

**Company/undertaking identification**

**Supplier/Manufacturer:**

Haifa Chemicals Ltd.

P.O.Box 15011, Matam

Haifa, 31905, Israel

Tel: +972-74-7373737

Fax: +972-74-7373733

Email: [Regulatory@haifa-group.com](mailto:Regulatory@haifa-group.com)

**E-mail address of person responsible for this SDS:** [Regulatory@haifa-group.com](mailto:Regulatory@haifa-group.com)

### 1.4 Emergency telephone number


**Emergency telephone number (including hours of operation):** +972-74-7373737

CHEMTREC (U.S.): 1-800-424-9300

## Section 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

Classification in accordance to Regulation(EC) No. 1272/2008 (CLP/GHS)

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<b>Ingredient name</b>	<b>GHS Classification</b>
Monosodium Phosphate Anhydrous	-

**Classification according to Directive 67/548/EEC (DSD) or 1999/45/EC**

<b>Ingredient name</b>	<b>EU Classification</b>
Monosodium Phosphate Anhydrous	-

See section 16 for full text of the R phrases or H statements declared above.

See section 11 for more detailed information on health effects and symptoms.

## **2.2 Label elements**

**Labeling in accordance with Regulation 1272/2008 (CLP)**

**Hazard pictograms:** Not classified

**Signal word:** Not required

**Hazard statements:** Not classified

**Precautionary Statements:** Not classified

## **2.3 Other hazard**

**Substance meets the criteria for BBT according to Regulation (EC) No. 1907/2006, Annex XIII:**

Not applicable

**Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII:**

Not applicable

**Other hazard which do not result in classification:**

Not applicable


## **Section 3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Substance/mixture:**

<b>Product/ Ingredient name</b>	<b>Identifiers</b>	<b>%</b>	<b>EU Classification</b>	<b>GHS Classification</b>
Monosodium Phosphate Anhydrous	CAS : 7558-80-7 EC :231-449-2	100	-	-

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in section 8.

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## **Section 4. FIRST AID MEASURES**

### **4.1 Description of first aid measures**

- Eyes contact:** In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if irritation occurs.
- Skin contact:** Avoid prolonged or repeated contact with skin. After handling, always wash hands thoroughly with soap and water. Get medical attention if irritation develops.
- Inhalation:** Avoid breathing dust. If inhaled, remove to fresh air.
- Ingestion:** If large quantities of this material are swallowed, give 2-3 glasses of water to drink and call a physician immediately. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

### **4.2 Most important symptoms and effects, both acute and delayed**

#### **Potential acute health effects**

Inhalation: May cause irritation to the respiratory tract. Symptoms may include coughing, sneezing, chest pain, runny nose and burning throat.

Ingestion: May cause gastrointestinal irritation. Symptoms may include nausea, vomiting and diarrhea.

Skin contact: May cause mild irritation to skin. Symptoms may include redness and burning.

Eyes contact: Can cause irritation to eyes. Symptoms may include stinging, tearing, redness and swelling. Dust have a dehydrating effect.

#### **Over-exposure sign/symptoms:**

Eyes contact: No specific data

Inhalation: Inhalation of product may aggravate existing chronic respiratory disease.

Ingestion: No specific data

Skin contact: Prolonged contact with the dry material may cause dryness or cracking of the skin.

### **4.3 Indication of any immediate medical attention and special treatment needed**

**Notes to physician:** In case if inhalation of decomposition products I a fire, symptoms may be delayed. The exposure person may need to be kept under medical surveillance for 48 hours.


**Special treatments:** No specific treatment

## **Section 5: FIRE-FIGHTING MEASURES**

### **5.1 Extinguishing media**

Suitable: Use water spray, dry chemical, carbon dioxide or appropriate foam.

Not suitable: N/A

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## **5.2 Special hazards arising from the substance or mixture**

Non-combustible.

Hazardous thermal decomposition products: Under fire - oxides of sodium and oxides of phosphorous.

## **5.3 Advice for firefighters**

**Special protective equipment for fire fighters:** Fire-fighters should wear appropriate protective equipment and self contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

**Remark:** Move containers from fire area if possible to do so without risk

## **Section 6: ACCIDENTAL RELEASE MEASURES**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective clothing. Ventilate area of spill.

### **6.2 Environmental precautions**

Avoid contact of spilt material and runoff with soil and surface waterways.

### **6.3 Methods and materials for containment and cleaning up**

Small spill: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust.

Large spill: As for small spill

**Personal Protection in Case of Large Spill:** Safety glasses. Full suit. Dust respirator. Boots. Gloves. A self- contained breathing apparatus should be used to avoid inhalation of the product.

### **6.4 Reference to other sections**

See Sections 1 for emergency contact information

See Section 8 for information on a appropriate personal protective equipment

See Section 13 for additional waste treatment information

## **Section 7: HANDLING AND STORAGE**

### **7.1 Precautions for safe handling**

**Handling:** Minimize dust generation and accumulation. Do not breathe dust. Avoid contact with skin and eyes. Wash thoroughly after handling. Do not permit eating/drinking/smoking near the material.

#### **Hygiene Measures:**


Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also section 8 for additional information measures.

### **7.2 Conditions for safe storage, including any incompatibilities**

**Storage:** Keep containers tightly closed, in dry, cool and well-ventilated place. Protect from moisture. Do not store together with strong oxidizing agents, strong acids and strong bases.

Keep away from heat.

Packaging materials Recommended: Use original container.

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**7.3 Specific use(s):** N/A

## **Section 8: EXPOSURE CONTROL / PERSONAL PROTECTION**

### **8.1 Control parameters**

**Occupational exposure limit values:**

<b><u>Ingredient name</u></b>	<b><u>Occupational exposure limits</u></b>
Disodium Phosphate Dihydrate	ACGIH-TLV 10 mg/m <sup>3</sup> (TWA), nuisance dust - inhalable particulate ACGIH-TLV 3 mg/m <sup>3</sup> (TWA), nuisance dust - respirable particulate OSHA-PEL 15 mg/m <sup>3</sup> (TWA), total dust OSHA-PEL 5 mg/m <sup>3</sup> (TWA), nuisance dust - respirable particulate

**Deraived effects levels:**

Recommended occupational and consumer exposure limit values (following from the preformed CSA):  
N/A

### **8.2 Exposure controls**

#### **Enginnering Measures**

Use process enclosures, local exhaust ventilation, or others engineering controls to keep airborne levels below recommend exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

#### **Person Protective measures**

**Occupational exposure controls:**

Respiratory protection: Disposable particulate mask. Be sure to use an approved/certified or equivalent. Wear appropriate respirator when ventilation is inadequate.


Hand protection: Wear protective gloves to prevent skin exposure.

Eye protection: Wear protective safety glasses.

Skin protection: Wear appropriate long-sleeved clothing to minimize skin contact.

Hygiene measures: Keep away from foodstuffs and beverages. Do not eat, drink or smoke during work time. Remove soiled or soaked clothing immediately. Clean skin thoroughly after work; apply skin cream. During use, provide suitable ventilation.

**Environmental exposure controls:** Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

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## **Section 9: PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1 Information on basic physical and chemical properties**

Appearance: Solid (powder or granular), white

Odour: Odorless

Odour threshold: Odorless

pH: 4.1-4.7 (Conc. (% w/w): 1) [Acidic]

Melting point/Freezing point: Not applicable

Initial boiling point/boiling range: Not applicable

Flash point: Not applicable

Evaporation rate: Not Volatile (butyl acetate=1)

Flammability: Not flammable

Upper/lower flammability or explosive limits: N/A

Vapor pressure: <0.001 kPa (<0.01 mm Hg) at 20°C (68°F)-Not Volatile

Vapor density: Not Volatile

Relative Density: >2 g/cm<sup>3</sup> (exact value isn't found)

Solubility(ies): Water solubility- 83.5g/100g of water at 20°C (68°F)

Partition coefficient Octanol/Water: The product is more soluble in water; log (octanol/water) <1

Auto-ignition temperature: Not applicable

Decomposition temperature: >180°C (356°F) release of water of constitution, becomes polyphosphates.

Viscosity: Not Viscous

Explosive properties: Not explosive

Oxidizing properties: Not oxidizer

### **9.2 Other information:**

Molecular weight: 119.98 g/mol

Miscibility: Not applicable

Fat solubility: Not applicable

Conductivity: Not applicable

Gas group: Not applicable

VOC: Not an organic compound

Apparent (Bulk) Density: 0.5-0.8 g/cm<sup>3</sup> – powder

1.2-1.4 g/cm<sup>3</sup> - granular

## **Section 10: STABILITY AND REACTIVITY**

### **10.1 Reactivity**

No specific test data related to reactivity available for this product or its ingredients

### **10.2 Chemical stability**

The product is stable under normal handling and storage conditions described in Section 7.

### **10.3 Possibility of hazardous reactions**

Under normal conditions of storage and use, hazardous reactions will not occur.


### **10.4 Conditions to avoid**

Extreme humidity, excess heat.

### **10.5 Incompatible materials**

Strong oxidizing agents, strong acids and strong bases.

### **10.6 Hazardous Decomposition products:**

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Under fire - oxides of phosphorous, oxides of sodium.

## **Section 11: TOXICOLOGICAL INFORMATION**

### **11.1 Information on toxicological effects**

#### **Acute toxicity:**

<b>Product/ingredient name</b>	<b>Test</b>	<b>Species</b>	<b>Dose</b>
Monosodium Phosphate Anhydrous	LD50, Oral	Rat	>28290 mg/kg

#### **Irritation and corrosivity:**

Inhalation: May cause irritation to the respiratory tract. Symptoms may include coughing, sneezing, chest pain, runny nose and burning throat.

Ingestion: May cause gastrointestinal irritation. Symptoms may include nausea, vomiting and diarrhea.

Skin contact: May cause mild irritation to skin. Symptoms may include redness and burning.

Eyes contact: Can cause irritation to eyes. Symptoms may include stinging, tearing, redness and swelling. Dust have a dehydrating effect.

**Sensitization:** N/A

#### **Chronic toxicity:**

Carcinogenicity: This product does not contain any substances that are considered by IARC, NTP, OSHA, EU or ACGIH to be "probable" or "suspected" human carcinogens.

Mutagenicity: Not applicable.

Reproductive toxicity: Not applicable.

Specific target organ toxicity (single exposure): Not applicable.

Specific target organ toxicity (repeated exposure): Not applicable.

Aspiration hazard: Not applicable.

#### **Other effects**

Over exposure signs/symptoms:


Skin: Prolonged contact with the dry material may cause dryness or cracking of the skin.

Inhalation: Inhalation of product may aggravate existing chronic respiratory disease.

Target organs: No specific data.

Toxicokinetics: N/A

## **Section 12: ECOLOGICAL INFORMATION**

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#### **12.1 Toxicity**

Not available

#### **12.2 Persistence and Degradability**

Not applicable, since inorganic substance.

#### **12.3 Bioaccumulative potential**

Not available

#### **12.4 Mobility in soil**

Soil/water partition coefficient (Koc): N/A

**Mobility:** Soluble in water.

#### **12.5 Results of PBT and vPvB assessment**

Not applicable

#### **12.6 Other adverse effects**

Substances which have an unfavorable influence on the oxygen balance and can be measured using parameters such as BOD, COD, etc.: Absent

Substances, which contribute to eutrophication: Phosphates, 57.8% as P<sub>2</sub>O<sub>5</sub>

### **Section 13: DISPOSAL CONSIDERATIONS**

#### **13.1 Waste treatment methods**

**Provisions relating to waste:** Directive 2008/98/EC on waste, of 19 November, 2008: Depending on branch of industry and production process, also other EURL codes may be applicable  
06 03 14: solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13

#### **Product**

**Methods of disposal:** Waste must be disposed of in accordance with federal, state and local environmental control regulations.

**Hazardous waste:** N/A


#### **Packing**

Empty containers should be taken for local recycling, recovery or waste disposal.

### **Section 14: TRANSPORT INFORMATION**

**International transport regulations**



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Regulatory Information	14.1 UN number	14.2 Proper shipping name	14.3 Classes	14.4 Packing group	14.5 Environmental hazard	14.6 Special precautions for user	Additional information
ADR/RID Class	Not Regulated	-	-	-	-	-	-
ADNR Class	Not Regulated	-	-	-	-	-	-
IMDG class	Not Regulated	-	-	-	-	-	-
IATA class	Not Regulated	-	-	-	-	-	-

#### **14.7 Transport to bulk according to Annex II of MARPOL 79/78 and the IBC Code**

Not applicable

### **Section 15: REGULATORY INFORMATION**

#### **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use

EU Regulation(EC) No.1907/2006 (REACH), No 1272/2008 (CLP)

#### **15.2 Chemical safety assessment**

In accordance with REACH article 14, a Chemical Safety Assessment has been carried out for this substance.

### **Section 16: OTHER INFORMATION**

**Full text of R-phrases referred to in sections 2 and 3:** N/A

**Safety phrases:** N/A

**Full text of Hazards Statements referred to in sections 2 and 3:** N/A

**Precautionary Statements:** N/A

**Training advice:** Before using/handling the product one must read carefully present MSDS.


**Recommended restriction:** N/A

Key Legend Information:

ACGIH- American Conference of Governmental Industrial Hygienists

OSHA- Occupational Safety and Health Administration

NTP- National Toxicology program

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IARC- International Agency for Research on Cancer

ND- Not Determined

N/A- Not available

R-phrases- Risk phrases

S-phrases- Safety phrases

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Version no. 4

To the best of our knowledge the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.